

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspio.gov

APPLICATION NO. FILING DATE		DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,952	10/802,952 03/16/2004		Akira Matsunami	TI-34611.1	4215
23494	7590	08/11/2004	•	. EXAMINER	
=	STRUMENT	ROMAN,	ROMAN, ANGEL		
P O BOX 65 DALLAS, 7	55474, M/S 399 FX - 75265	99	ART UNIT	PAPER NUMBER	
21122110,	22,			2812	
				DATE MAILED: 08/11/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/802,952	MATSUNAMI, AKIRA					
Office Action Summary	Examiner	Art Unit					
	Angel Roman	2812					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on	Responsive to communication(s) filed on						
2a) ☐ This action is FINAL . 2b) ☒ This	This action is FINAL . 2b) This action is non-final.						
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-3 is/are pending in the application.							
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3</u> is/are rejected.	☑ Claim(s) <u>1-3</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>16 March 2004</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correcti							
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)					

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Nshizawa et al. U.S. Patent 5,910,010 A.

Nishizawa et al. discloses a method of molding semiconductor assemblies on multiple semiconductor substrates/leadframes (6) comprising the steps of; providing vertically stacked molding die layers 87 stacked one above the other with die halls between the stacked die layers and a die hall in a top die layer (see figure 105); providing semiconductor substrates with semiconductor assemblies M between said vertically stacked layers; and flowing molding compound 65 through said top layer into the substrate/leadframe in the top die section and from the top die section through die halls between stacked die layers to the other substrate/leadframes between stacked layers (see figure 87). The flowing step includes runners or channels for distributing molding compounds in the die sections and the flowing step includes a press rod 64 for pressing the molding compound through said die hall in said top die (see figure 87).

Application/Control Number: 10/802,952 Page 3

Art Unit: 2812

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ross and Plummer et al. disclose methods of molding stacked semiconductor assemblies.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel Roman whose telephone number is (571) 272-1681. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on (571) 272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR August 9, 2004

John F. Niebling Supervisory Patent Exeminar Technology Center 2800